

ABSTRACT OF THE DISCLOSURE

A method for determining the position of a shaft of a commutated direct current (DC) motor based on the current ripples contained in an armature current signal includes digitally sampling the armature current signal to generate
5 signal values at sampling points. The signal value corresponding to a current sampling point and selected signal values corresponding to previous sampling points in a time interval containing the sampling points are compared. Either a rising or falling slope detection signal is generated if the comparison is indicative of either an increasing or decreasing tendency in the magnitudes of the signal values. The
10 rising and falling slope detection signals are respectively indicative of rising and falling current ripple slopes. A current ripple signal is generated if rising and falling slope detection signals are generated one after the other in a given period. The shaft position is determined based on the current ripple signal count.